REMARKS

As of the mailing date of the Office Action dated May 7, 2007, claims 22 and 23 were pending and under examination. Reconsideration of the instant application is respectfully requested in view of the following remarks.

Rejections under 35 U.S.C. § 102(b)

Claims 22 and 23 stand rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Creson *et al.* (Journal of Virology 73(11) 1999). In particular, the Action alleges that while Creson *et al.* do not particularly disclose a step of applying a magnetic force to drive T cell concentration onto the beads via T cell surface moiety ligation, this step is inherently achieved by the method of Creson *et al.* using paramagnetic beads to stimulate T cells.

Applicants respectfully traverse this rejection on the following grounds. The Action admits at page 4 that Creson *et al.* "*do not particularly disclose a step of applying a magnetic force*" but asserts that "*this step is inherently achieved by the method of Creson et al. using paramagnetic beads to stimulate T cells*". It is entirely unclear how the Action arrives at the conclusion that simply contacting T cells with paramagnetic beads without actually applying a magnetic force inherently achieves simultaneous concentration and stimulation. Applicants submit that, as shown in the instant application, simultaneous concentration and stimulation is achieved by applying a force greater than gravity (e.g., a magnetic force), a step specifically recited in the present claims. In particular, as disclosed in the instant application, applying a force to simultaneously concentrate and stimulate the T cells results in a dramatic increase in T cell expansion and expression of T cell stimulation markers (see for example, page 79 of the specification as filed; Table 2, Figures 3 and 4). As noted in the specification, this is only achieved through application of the force greater than gravity, *e.g.*, a magnetic force, not simply by contacting the cells with the paramagnetic bead. Thus, Applicants stress that contacting T cells with paramagnetic beads is not the same as contacting T cells with a paramagnetic bead and applying a magnetic force as asserted by the Action.

Applicants further submit that while Creson *et al.* teach methods for inducing T-cells to proliferate using various antibodies, including anti-CD3 and anti-CD28 antibodies

Creson *et al.* do not teach simultaneously concentrating and activating the cells at all, and clearly not with a magnet. In particular, Applicants submit that Creson *et al.* merely describe the use of the antibody-coated paramagnetic beads to enrich for $CD4^+$ T cells by depletion of $CD8^+$ and $CD14^+$ cells. Applicants submit that neither CD8 nor CD14 ligation leads to stimulation or proliferation of T-cells, whether in the presence of a magnetic force or not. Further, according to the Materials and Methods section at page 9338, the enriched cells are then stimulated with anti-CD3 and anti-CD28 antibodies either directly coated on plastic tissue culture plates or immobilized on sheep anti-mouse immunoglobulin G-coated magnetic beads. The Methods section goes on to state "On day 3 poststimulation, T cells were removed from the coated plates while bead-stimulated cells were split into two cultures; beads were either removed (beads-out) or left in the culture for the duration of the experiment (beads-in)." The Action asserts at page 2 that "...because the method of Creson *et al.* utilizes a paramagnetic bead such as Dynabead M-450 *which is used for simultaneous stimulation because of magnetic field applied to the beads coated with anti-CD3 and anti-CD28 antibodies* to ligate and concentrate the cells having CD3 and CD28 ligands." Contrary to the Action's assertions, there is simply no teaching or suggestion, either explicit or inherent, by Creson *et al.* of applying a magnetic force to concentrate and simultaneously stimulate the T-cells. As noted above, Creson *et al.* do not manipulate the stimulated cells until 3 days poststimulation and even then, there is simply no mention of applying a magnetic force to concentrate or stimulate the cells. Rather, the beads are simply removed or left in the culture. As such, Applicants submit that Creson *et al.* do not teach the limitation recited in the claims of "simultaneous T cell concentration and cell surface moiety ligation" and, as admitted by the Action, certainly do not teach the limitation of step (b) of "applying a magnetic force". Thus, the Creson *et al.* reference does not teach each and every element of the claims and does not anticipate the presently claimed invention. Reconsideration of the claims and withdrawal of the rejection are respectfully requested.

Applicants respectfully submit that all of the claims remaining in the application are now believed to be in condition for allowance. Favorable consideration and a Notice of Allowance are earnestly solicited.

The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

Respectfully submitted,

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